

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF TWO EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTIONS OF MD 528 (PHILADELPHIA STREET) AND NORTH DIVISION STREET AND MD 528 (PHILADELPHIA STREET) AND SOMERSET STREET IN WORCESTER COUNTY. MD 528 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

1. MD 528 (PHILADELPHIA AVE.) AND NORTH DIVISION STREET

THE INTERSECTION WILL OPERATE IN A NEMA THREE-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE MD 528 APPROACH OPERATING ALONE AND THE NORTH DIVISION STREET APPROACH OPERATING ALONE.

AN ALTERNATE PEDESTRIAN PHASE IS PROVIDED ACROSS THE SOUTH LEG OF MD 528.

2. MD 528 (PHILADELPHIA AVE.) AND SOMERSET STREET

THE INTERSECTION WILL OPERATE IN A NEMA FOUR-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE MD 528 APPROACH OPERATING ALONE AND THE SOMERSET STREET APPROACH OPERATING ALONE.

AN ALTERNATE PEDESTRIAN PHASE IS PROVIDED ACROSS THE NORTH AND SOUTH LEGS OF MD 528.

CONTROLLER REQUIREMENTS

1. MD 528 (PHILADELPHIA AVE.) AND NORTH DIVISION STREET

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH TWO (2) FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIERS, INTERSECTION MONITOR WITH BATTERY BACKUP FOR PHONE DROP AND ASSOCIATED HARNESSSES HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.

2. MD 528 (PHILADELPHIA AVE.) AND SOMERSET STREET

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH TWO (2) FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIERS, INTERSECTION MONITOR WITH BATTERY BACKUP FOR PHONE DROP AND ASSOCIATED HARNESSSES HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.

3. MD 528 (PHILADELPHIA AVE.) AND WORCESTER STREET

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH INTERSECTION MONITOR WITH BATTERY BACKUP FOR PHONE DROP AND ASSOCIATED HARNESSSES HOUSED IN A NEMA SIZE "6" POLE MOUNTED CABINET.

MAINTENANCE OF TRAFFIC

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT.

STANDARD NO. MD-104.00 - 104.00-30

STANDARD NO. MD-104.45-01 (RIGHT LANE CLOSURE)

STANDARD NO. MD-104.37-01 (LEFT LANE CLOSURE)

STANDARD NO. MD-104.46-01 (CENTER LANE CLOSURE)

STANDARD NO. MD-104.38-01 (RIGHT LANE CLOSURE)

STANDARD NO. MD-104.41-01 (INTERSECTION FAR-RIGHT LANE CLOSURE)

STANDARD NO. MD-104.44-01 (LEFT LANE CLOSURE)

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. GENE COPIELL
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 677-4040

MR. BRUCE W. POOLE
DISTRICT UTILITIES ENGINEER
PHONE: (410) 677-4082

MR. JAMES R. WRIGHT
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 677-4010

MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

CATEGORY CODE	QUANTITY	DESCRIPTION
900000	1 EACH	NEMA SIZE "6" POLE MOUNTED CABINET
900000	2 EACH	VIDEO INTERFACE EQUIPMENT
963010	4 EACH	FOUR-CHANNEL, TIME-DELAY-OUTPUT, LOOP DETECTOR AMPLIFIER
900000	1 EACH	MASTER CONTROLLER
971017	2 EACH	EIGHT-PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER WITH INTERSECTION MONITOR HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET
973023	146 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF : - 2 EACH R3-5R SIGN (30 IN. x 36 IN.) - MAST ARM MOUNT - 1 EACH R3-1 SIGN (30 IN. x 30 IN.) - MAST ARM MOUNT - 2 EACH R3-2 SIGN (30 IN. x 30 IN.) - MAST ARM MOUNT - 1 EACH R10-11A SIGN (24 IN. x 30 IN.) - MAST ARM MOUNT - 3 EACH D-3(1) SIGN (VARIABLE x 16 IN.) DUAL FACED - MAST ARM MOUNT - 2 EACH D-3(1) SIGN (VARIABLE x 16 IN.) - MAST ARM MOUNT - 1 EACH R2-1 (MODIFIED) (36 IN. x 36 IN.) - MAST ARM MOUNT - 1 EACH G-1 SIGN (120 IN. x 48 IN.) - MAST ARM MOUNT "INLET PARKING LOT/ 2 RIGHT LANES"

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

CATEGORY CODE	QUANTITY	DESCRIPTION
203030	7 CY	TEST PIT EXCAVATION
585620	520 LF	12 INCH WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
585624	140 LF	24 INCH WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
801004	25 CY	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
802501	750 LF	FURNISH AND INSTALL NO. 6 A.W.G. STRANDED BARE COPPER GROUND WIRE
805115	300 LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT - BORED
805118	500 LF	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT - BORED
805135	1200 LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805140	200 LF	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805160	40 LF	FURNISH AND INSTALL 1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR WIRE SLEEVE
807400	3 EA	FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT (120/240 V., 1 PHASE 3 WIRE SYSTEM)
810010	90 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 1 CONDUCTOR NO. 4 A.W.G. - THHN/THWN
810550	7 EA	FURNISH AND INSTALL MICROLOOP PROBE SET WITH 500 FOOT LEAD-IN CABLE
811011	21 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
813015	146 SF	INSTALL OVERHEAD SIGN
816010	4 EA	FURNISH AND INSTALL 500 FT. VIDEO DETECTION CABLE
818004	4 EA	FURNISH AND INSTALL 10 FT. PEDESTAL POLE
818021	1 EA	FURNISH AND INSTALL 27 FT. STEEL POLE WITH TWIN 50 FT./50 FT. MAST ARMS
800000	1 EA	FURNISH AND INSTALL STEEL POLE (15' T) WITH SINGLE 50 FT. MAST ARM
818041	2 EA	FURNISH AND INSTALL 27 FT. STEEL POLE WITH SINGLE 60 FT. MAST ARM
818051	1 EA	FURNISH AND INSTALL 27 FT. STEEL POLE WITH TWIN 50 FT./70 FT. MAST ARMS
822002	2200 LF	FURNISH AND INSTALL 12 PAIR COMMUNICATION CABLE, JELLYFILLED (UNDERGROUND)
831010	3 EA	FURNISH AND INSTALL 250 WATT HPS LUMINAIRE WITH PHOTOCELL
837001	10 EA	FURNISH AND INSTALL GROUND ROD - 3/4 INCH DIAMETER x 10 FOOT LENGTH
860272	34 EA	FURNISH AND INSTALL 12 IN. VEHICULAR TRAFFIC SIGNAL HEAD SECTION
860278	24 EA	FURNISH AND INSTALL 12 IN. PEDESTIAN TRAFFIC SIGNAL HEAD SECTION
861105	800 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 A.W.G.)
861106	1600 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 3 CONDUCTOR (NO. 14 A.W.G.)
861107	1900 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G.)
861116	600 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 A.W.G.) TYPE TC
862102	200 LF	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
866101	3 EA	FURNISH AND INSTALL 10 FOOT LIGHTING BRACKET ARM FOR TRAFFIC SIGNAL STRUCTURE
871117	2 EA	INSTALL CONTROLLER AND CABINET - BASE MOUNT
800000	1 EA	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT
800000	50 LF	FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
816001	4 EA	FURNISH AND INSTALL VIDEO DETECTION CAMERA
805025	30 LF	FURNISH AND INSTALL 1 IN. ELECTRICAL CONDUIT - PVC RISER
871201	1 EA	INSTALL CONTROLLER AND CABINET - POLE MOUNT
860292	3 EA	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
800000	1 EA	FURNISH AND INSTALL LED BLANKOUT SIGN
865001	6 EA	FURNISH AND INSTALL PUSHBUTTON AND SIGN

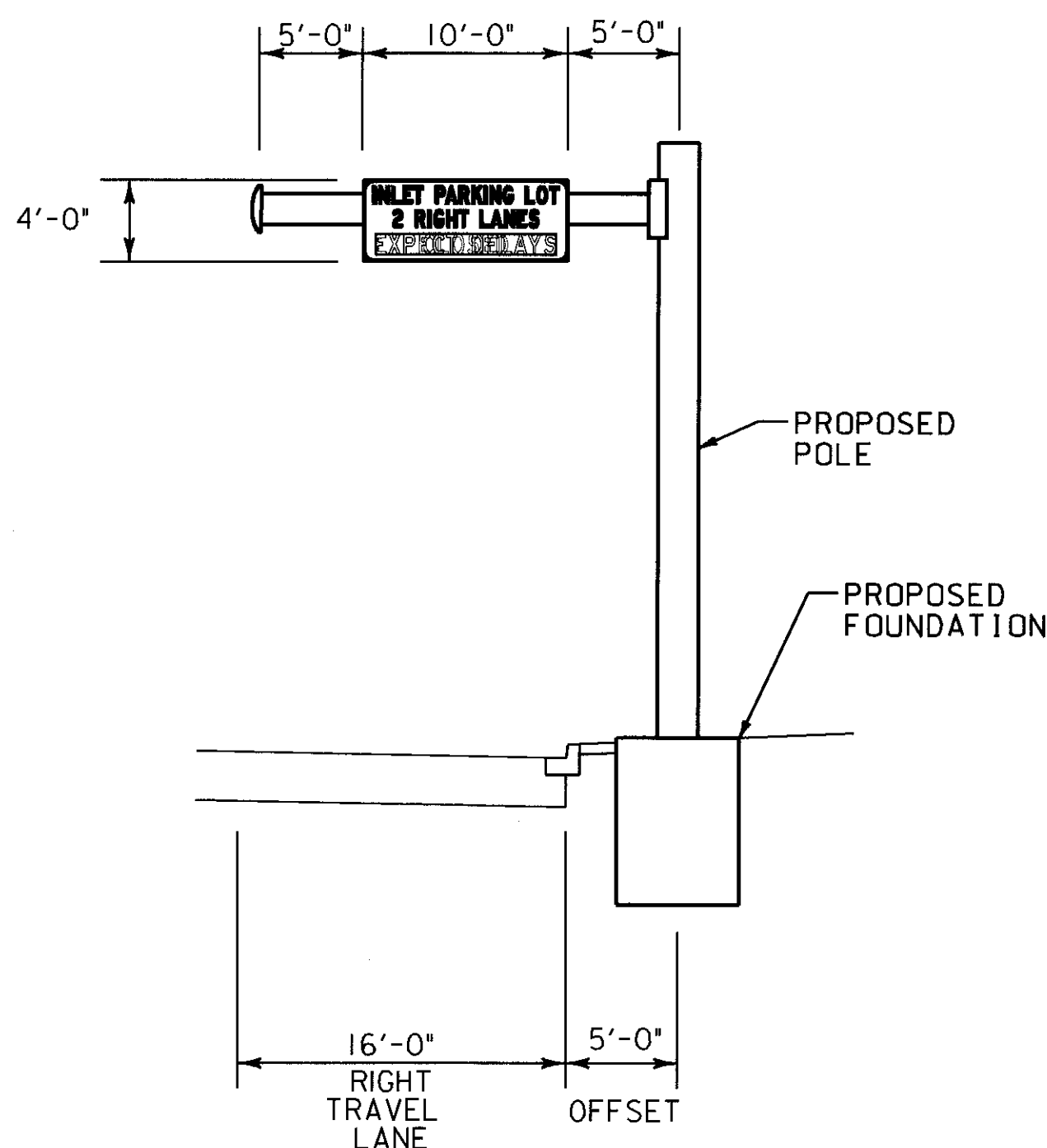
EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED

SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET AT MD 528 AND NORTH DIVISION STREET AND MD 528 AND SOMERSET STREET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME PROPERTY OF THE CONTRACTOR.

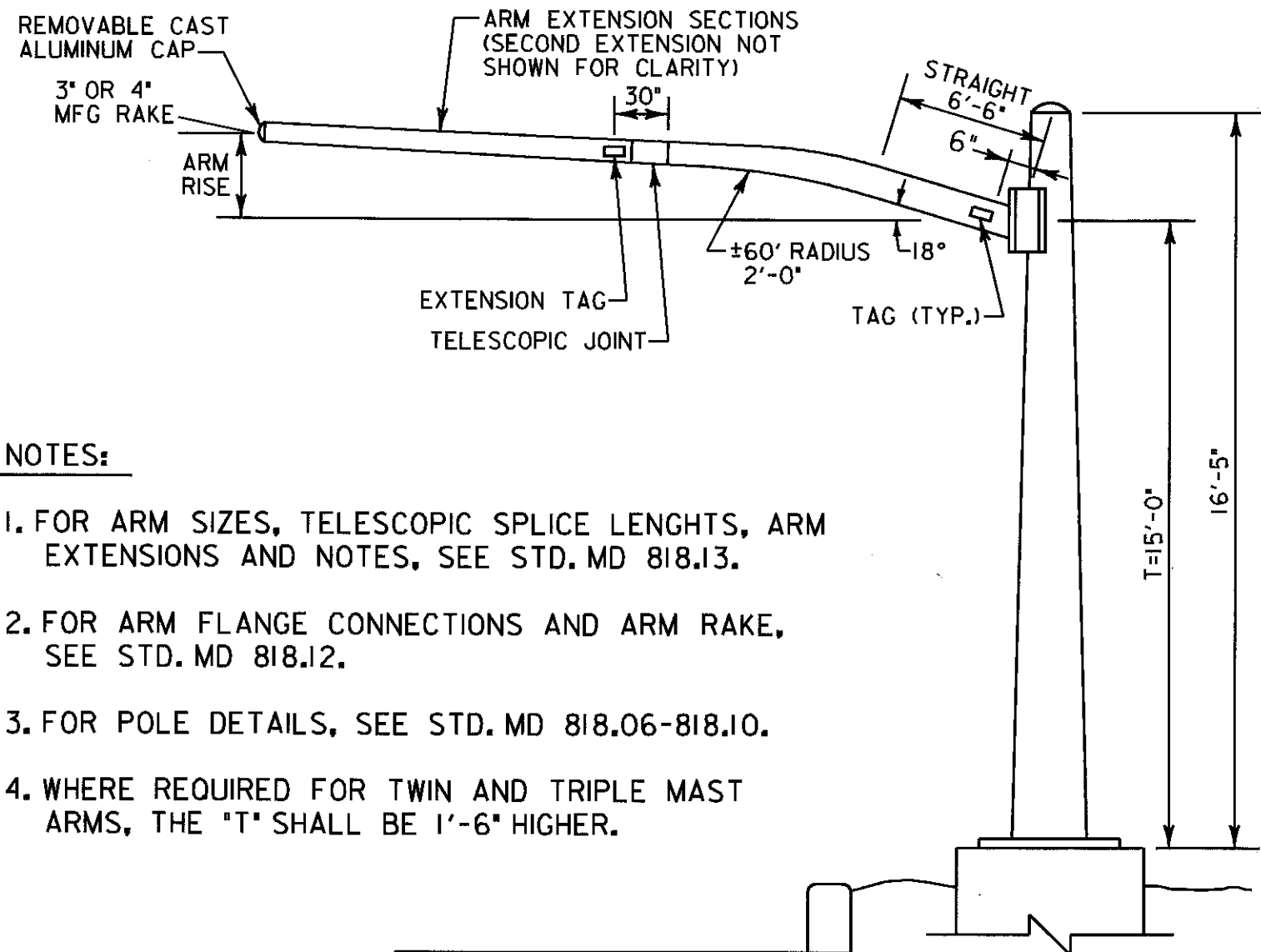
LED SIGN SUPPORT DETAIL

NOT TO SCALE



15'-0" "T" STEEL POLE DETAIL

NOT TO SCALE



NOTES:

- FOR ARM SIZES, TELESCOPIC SPLICE LENGHTS, ARM EXTENSIONS AND NOTES, SEE STD. MD 818.13.
- FOR ARM FLANGE CONNECTIONS AND ARM RAKE, SEE STD. MD 818.12.
- FOR POLE DETAILS, SEE STD. MD 818.06-818.10.
- WHERE REQUIRED FOR TWIN AND TRIPLE MAST ARMS, THE *T* SHALL BE 1'-6" HIGHER.

TSP-5



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION

Office of Traffic & Safety

TRAFFIC ENGINEERING DESIGN DIVISION

GENERAL INFORMATION SHEET

MD 528 (PHILADELPHIA AVE.)



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and Associates, LLP

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(410) 235-3450

DRAWN BY: B. MARTINE

CHECKED BY: N. LEARY

SCALE: NONE

DATE: 10/7/2002

F.A.P. NO.

S.H.A. NO.

COUNTY:

LOG MILE:

SEE TITLE SHEET

W05025131

WORCESTER

TS NO.

E142

SHEET NO.

6 OF 19